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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,884	02/21/2002	Robert Hatzl	22123	9947
535	7590	12/27/2004	EXAMINER	
THE FIRM OF KARL F ROSS 5676 RIVERDALE AVENUE PO BOX 900 RIVERDALE (BRONX), NY 10471-0900			ALIMENTI, SUSAN C	
			ART UNIT	PAPER NUMBER
			3644	

DATE MAILED: 12/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/081,884		HATZL ET AL.	
	Examiner		Art Unit	
	Susan C. Alimenti		3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,6-9,11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) 4,6 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-9 and 13 is/are rejected.
- 7) ☒ Claim(s) 5 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/8/4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 4, 6 and 11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 12 November 2004.
2. Applicant's election with traverse of invention I in the reply filed on 12 November 2004 is acknowledged. The traversal is on the grounds that the inventions of claims 4 and 7 have the same utility, and that the particulars of the subcombination are essential to the combination. This is not found persuasive. First, the fact that the subcombination and combination have the same utility is not relevant here. The focus for reasons of restriction is whether the subcombination has a separate utility from the combination, and as explained in the restriction requirement, it does in fact have a separate utility. Second, the particulars of the subcombination, i.e. the metal types recited for the bridgewire and the reactive layer, are not recited as being essential to the combination, as metals other than those specifically recited in claims 7, 9, and 13 could be used.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claims 5 and 12 are objected to because of the following informalities: Claims 5 and 12 appear to have been canceled or withdrawn from prosecution, however they are not listed with status identifiers in the most recent amendment submitted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7, 9, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Said claims recite the limitations, "a metal" in line 4 of each claim, and "comprised of metal" in line 8 of each claim. The subject matter of the claims becomes confusing, and an antecedent basis problem arises in line 9 of each claim when "the metal" is recited.

It is suggested that if the applicant intends to define two metals in the claims they be referred to as "a first metal," and later as "a second metal."

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 7, 8 and 13 are rejected under 35 U.S.C. 102(a) as being anticipated by Baginski (WO 02/21067 A2).

Baginski discloses a pyrotechnic initiator comprising a bridgewire 106 having a reacting layer 109 formed of at least titanium and nickel (page 6, ¶ 1-2). The layer 109 is deposited on a palladium layer 126, which comprises the bridgewire 106 and may bond with the layer 126 (page

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7, ¶ 2-3). Further, layer 109 is considered to “capable of” alloying with the metal, i.e. palladium, of the bridgewire 106.

Regarding claim 8 the ignition promoter is considered to be titanium.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahmberg et al. (US 4,869,170).

Dahmberg et al. (Dahmberg) discloses a pyrotechnic device comprising an initiator bridge composed of a metal such as platinum, and a reacting layer comprising aluminum. When the platinum and aluminum are alloyed, heat is released thus initiating the reaction (Dahmberg col.7, lns.21-31). While it is noted that platinum is disclosed as a layer here, it is well known for its suitability as a bridgewire material, as shown by Zeman et al. (col.2, lns.42-45). It would be obvious to one having ordinary skill in the art at the time the invention was made to make the bridgewire from platinum and coat it with aluminum for design simplicity since it is well known in the art to use platinum as a bridgewire, and such a modification would not alter the scope of Dahmberg's invention. It is further noted that such a modification would simplify the

manufacturing process, since only an aluminum layer would need to be applied to the bridgewire.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan C. Alimenti whose telephone number is 703-306-0360. The examiner can normally be reached on Monday-Friday, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 703-305-7421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SCA



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